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                 CAplus coverage extended to include traditional medicine
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         SEP 17
                 patents
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                 CA/CAplus enhanced with pre-1907 records from Chemisches
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                 BEILSTEIN updated with new compounds
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                WPIX enhanced with XML display format
NEWS 18 NOV 19
                 ICSD reloaded with enhancements
NEWS 19 NOV 30
NEWS 20 DEC 04 LINPADOCDB now available on STN
NEWS 21 DEC 14 BEILSTEIN pricing structure to change
                 USPATOLD added to additional database clusters
NEWS 22 DEC 17
                 IMSDRUGCONF removed from database clusters and STN
NEWS 23 DEC 17
                 DGENE now includes more than 10 million sequences
         DEC 17
NEWS 24
                 TOXCENTER enhanced with 2008 MeSH vocabulary in
         DEC 17
NEWS 25
                 MEDLINE segment
                 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 26
         DEC 17
                 CA/CAplus enhanced with new custom IPC display formats
         DEC 17
NEWS 27
                 STN Viewer enhanced with full-text patent content
         DEC 17
NEWS 28
                 from USPATOLD
                 STN pricing information for 2008 now available
NEWS 29
         JAN 02
                 CAS patent coverage enhanced to include exemplified
         JAN 16
NEWS 30
                 prophetic substances
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
         JAN 28
NEWS 31
                 custom IPC display formats
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NEWS 32 JAN 28 MARPAT searching enhanced

NEWS 33 JAN 28 USGENE timeliness enhanced

NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment

NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008

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FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
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55190 POLYOL
                 (POLYOL OR POLYOLS)
         80509 DIOL
         24921 DIOLS
         94491 DIOL
                 (DIOL OR DIOLS)
             1 TRIOIL
         41925 TRIGLYCERIDES
             O POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
1.1
=> s polyol (L) triglyceride
         40393 POLYOL
         30859 POLYOLS
         55190 POLYOL
                 (POLYOL OR POLYOLS)
         44902 TRIGLYCERIDE
         41925 TRIGLYCERIDES
         72350 TRIGLYCERIDE
                  (TRIGLYCERIDE OR TRIGLYCERIDES)
           240 POLYOL (L) TRIGLYCERIDE
L2
=> s 12 and polyurethane
        131009 POLYURETHANE
        104340 POLYURETHANES
        161790 POLYURETHANE
                  (POLYURETHANE OR POLYURETHANES)
            45 L2 AND POLYURETHANE
L3 <sup>-</sup>
=> s 13 and seed
        159358 SEED
        101766 SEEDS
        208295 SEED
                  (SEED OR SEEDS)
T.4
             4 L3 AND SEED
=> d 14 1-4 ibib abs
     ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                         2007:913854 CAPLUS
                          Producing polyurethane foam from natural oil
TITLE:
                          Sanders, Aaron; Babb, David; Prange, Robbyn;
AUTHOR(S):
                          Sonnenschein, Mark; Delk, Van; Derstine, Chris; Olson,
                          Kurt
                          The Dow Chemical Company, Freeport, TX, 77541, USA
CORPORATE SOURCE:
                          Chemical Industries (Boca Raton, FL, United States)
SOURCE:
                          (2007), 115(Catalysis of Organic Reactions), 377-384
                          CODEN: CHEIDI; ISSN: 0737-8025
                          CRC Press LLC
PUBLISHER:
DOCUMENT TYPE:
                          Journal
                          English
LANGUAGE:
     As part of the effort to reduce our dependence on fossil fuels, The Dow
     Chemical Company has been developing a seed oil based
     polyol to be used as a replacement to conventional petrochem.
     based polyether polyols in the production of flexible
     polyurethane foam. The general process for making natural oil
     polyols consists of four steps. In the first step, a vegetable
     oil (triglyceride) is transesterified with methanol, liberating
     glycerin, and forming fatty acid Me esters or FAMEs. In the second step
```

the FAMEs are hydroformylated giving a complex mixture of FAMEs that contain 0-3 formyl groups per chain. In the third step, the aldehydes and the remaining unsaturates are hydrogenated to yield a mixture of FAMEs that contain 0-3 hydroxymethyl groups. Finally, the poly(hydroxymethyl) fatty esters are transesterified onto a suitable initiator to produce the natural oil polyol.

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS 16 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

2001:265371 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 134:281258

Preparation of transesterification polyols for TITLE:

polyurethane-prepolymers with specifically

regulated viscosity

Thiele, Lothar; Zander, Lars; Klein, Johann; Beuer, INVENTOR(S):

Bernd; Knips, Nicole; Doebrich, Peter.

Henkel K.-G.a.A., Germany PATENT ASSIGNEE(S):

PCT Int. Appl., 18 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent German LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE APPLICATION NO. KIND DATE PATENT NO. \_\_\_\_\_ -------**-**-----A1 20010412 WO 2000-EP9312 20000923 WO 2001025184 W: JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 20010419 DE 1999-19947563 DE 19947563 **A**1 20020703 EP 2000-967760 A1 20000923 EP 1218332 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY 20000923 JP 2001-528132 20030325 JP 2003511486 DE 1999-19947563 A 19991002 PRIORITY APPLN. INFO.:

W 20000923

WO 2000-EP9312 Transesterification polyols, useful as polyols for AB producing polyurethane prepolymers, are produced by the transesterification of castor oil with natural triglycerides (e.g., rape seed oil) that are free of OH-groups in the presence of Group IA or IIA metal hydroxide catalysts (e.g., lithium hydroxide). Transesterification polyols of this type with polyisocyanates also have a low, constant viscosity in the form of solvent-free or water-free compns. and are suitable for producing single or multiple

component adhesives, sealants, casting compds. or coating agents. THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS 2 · REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

1994:79499 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 120:79499

Investigation of urethane oils based on Ecballium TITLE:

elaterium and P. mahaleb seed oils

Erciyes, A. T.; Erkal, F. S.; Kabasakal, O. S. AUTHOR (S): Fac. Chim. Metall., Istanbul Tech. Univ., Maslak, CORPORATE SOURCE:

80626, Turk.

SOURCE: Pitture e Vernici Europe (1993), 69(5), 17-22

CODEN: PVEUEO

DOCUMENT TYPE:

Journal

LANGUAGE:

English/Italian

AB Ecabellium elaterium and P. mahaleb seed oils were used in the preparation of urethane oil. Urethane oils are prepared by reacting a diisocyanate with the partial esters obtained from triglyceride oil. Consequently, urethane oils can be considered as an alkyd resin in which the phthalic anhydride is replaced by a diisocyanate. Film properties of these materials are dependent on the oil, polyol, and diisocyanate used in the formulation. Since Ecballium elaterium and P. mahaleb seed oils contain punicic and  $\alpha$ -elecsteric acids, resp., which are conjugated trienoic acids, the use of these oils as an oil component in the urethane oils is worth investigating. Although these oils contain conjugated double bonds, no gelation occurred during the process.

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:111497 CAPLUS

DOCUMENT NUMBER: 104:111497

ORIGINAL REFERENCE NO.: 104:17671a,17674a
TITLE: Polyol compositions

INVENTOR(S): Kusakawa, Tsutomu; Ito, Yoshiyuki
PATENT ASSIGNEE(S): Itoh Oil Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 60177013	Α	19850911	JP 1984-32980	19840222		
JP 03070731	В	19911108				
PRIORITY APPLN. INFO.:			JP 1984-32980	19840222		

AB Polyol compns. for 2-liquid polyurethane coatings are prepared by reaction of 1 mol triglycerides comprising 10-100% natural oils and fats with no OH groups and 0-90% castor oil, 0.1-2 mol alcs. containing tertiary N, and 0-1.9 mol low-mol.-weight polyols. The sum of the last 2 components are <2 mols. Thus, castor oil and rape seed oil were heated with Quadrol, then mixed with Takelac U-27 (polyester polyol) and Coronate L, and cured to form a coating.

### => d his

(FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008)

FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
L1 0 S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L2 240 S POLYOL (L) TRIGLYCERIDE

L3 45 S L2 AND POLYURETHANE L4 4 S L3 AND SEED

=> s 13 not 14

L5 41 L3 NOT L4

=> s 15 and diol

80509 DIOL 24921 DIOLS 94491 DIOL

(DIOL OR DIOLS)

L6

3 L5 AND DIOL

=> d 16 1-3 ibib abs

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1207938 CAPLUS

DOCUMENT NUMBER:

147:450033

TITLE:

Fire-resistant antisoiling curable compositions and low-hardness urethane rubbers and gels comprising them

INVENTOR(S):

Sato, Eisaku; Yasue, Masao

PATENT ASSIGNEE(S):

Inoac Corp., Japan; Inoac Technical Center Co., Ltd.

SOURCE:

Jpn. Kokai Tokkyo Koho, 13pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. PATENT NO. -----A 20071025 JP 2006-105117 JP 2006-105117 20060406 JP 2007277390 20060406 PRIORITY APPLN. INFO.: The compns. contain (A) OH-containing long-chain fatty acid-derived compds. with Mn ≥600 having 1.9-2.0 hydroxy groups per mol., (B) isocyanates or their diol derivs. having 2.0-3.0 NCO per mol., and (C) long-chain fatty acid glycerides, whose residual OH in glycerin parts and on carbon chains are modified. Thus, a composition comprising castor oil-based polyester polyol 60, acetylated ricinoleic acid triglyceride 40, dibutyltin dilaurate 0.1, and MDI-terminated prepolymer having polyoxypropylene chain 103 parts was sandwiched by PET films and cured to give a test piece showing C hardness (JIS K 7312) 10, UL-94 fire-resistant rating V-0, and no bleeding after storing under 70° and 7 kPa-load for 24 h nor deformation after storing at 80° for 24 h.

ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN L6

ACCESSION NUMBER: 2004:246921 CAPLUS

DOCUMENT NUMBER:

140:292678

TITLE:

Bone adhesives with improved biodegradation composed

of polyol-containing polyester-polyurethane

INVENTOR(S):

Siedentop, Tjark; Klein, Joachim; Uhr, Guenter

PATENT ASSIGNEE(S):

Curasan AG, Germany; Franz-Patat-Zentrum

Wissenschaftliches Forum fuer Interdisziplinaere

Polymerforschung E.V. Ger. Offen., 49 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. -------------------

DE 2002-10242075 20020911 DE 10242075 A1 20040325 DE 10242075 20070201 R4 PRIORITY APPLN. INFO.: DE 2002-10242075 20020911 The invention concerns bone adhesives that are composed of polyol -containing polyester-polyurethane; the polyester includes a triglyceride structure allowing for ester hydrolysis and an improved degradation in the body. The bone adhesive compns. include at least one polyurethane, a polyol-containing polyester, a catalyst, phosphates, calcium salts, amino acids and other components, e.g. dextran, glucose. Thus a composition contained: Merginat PV 235 1.1 mL; Luprinat M20W 0.6 mL; hexamethylene diisocyanate 0.25 mL; glycerin phosphate calcium salt 0.3 g. Upon application 2-ethylhexanoic acid zinc salt was added at a ratio of polyesterpolyol component:catalyst - 150: 1.

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2000:335490 CAPLUS

DOCUMENT NUMBER:

132:335908

TITLE:

PR

Aqueous dispersions of uralkyd resins and their

manufacture for coating wood

INVENTOR(S):

Damery, Shawn; Coogan, Richard George

PATENT ASSIGNEE(S):

Avecia Inc., USA

SOURCE:

PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.			KINI	)	DATE		i	APPI	ICAT	ION 1	<b>10.</b>		DA	ATE	
WO	2000	0279	38		A1	-	2000	0518	1	WO 1	1999-1	JS23	995		19	9991	102
	W:	ΑE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	ΒB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
		SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	ŪG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM								
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
EP	1129	147			A1		2001	0905		EP 1	1999-	9718	31		1:	9991	102
EP																	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	ΝL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO										
	2369	62			Т		2003	0415		AT 1	1999-	9718	31		1:	9991	102
ES	2193	786			Т3		2003			ES 1	1999-	9718	31		1	9991	102
US	6548	588			В1		2003	0415	1	US 2	2001-	8072	07		2	0010	529
ORITY	APF	LN.	INFO	.:					(	GB 1	1998-	2435	2	7	A 1	9981	106
											1998-			_	A 1:	9981	106
									1	WO 1	L999-1	US23	995	1	W 1	9991	102

AB Water-dispersible, air-drying uralkyd resins, aqueous dispersions and compns. optionally containing vinyl polymer(s), form coatings, where the uralkyd resin comprises 5-75% amide ester diol product obtained from the reaction of a triglyceride oil and an N,N-dialkanolamine, 1-10% pendant and/or terminal polyethylene oxide chains, carboxylate groups in the form of carboxylic acid-bearing polyols, 15-50% polyisocyanates, and 0-50% other polyols, and where the acid value of the uralkyd resin is 5-30 mg KOH/g resin. Thus, amide ester

diol (adduct of diethanolamine with soya fatty acids oil) 116.3, methoxy polyethylene oxide 20.3, TDI 118.3, 2,2-dimethylolpropionic acid 18, cyclohexanedimethanol 12.8 g, and N-methylpyrrolidone 74 g was heated to give a uralkyd resin, the resin was diluted with cosolvent and water, drier salt, and neutralized with dimethylethanolamine to give a dispersion having a viscosity 2400 cP and solids content 30.2%. Pine wood boards were treated with the above coating composition and dried to give good gloss and gloss retention 87% (after exposure to 90 min dry and 30 min wet at 60°).

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008)

3

FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008

O S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES L1

240 S POLYOL (L) TRIGLYCERIDE L2

L3 45 S L2 AND POLYURETHANE

4 S L3 AND SEED T.4

41 S L3 NOT L4 L5

3 S L5 AND DIOL L6

=> s 15 not 16

38 L5 NOT L6 L7

=> s 17 and triol

13933 TRIOL

2742 TRIOLS

15370 TRIOL

(TRIOL OR TRIOLS)

1 L7 AND TRIOL L8

=> d 18 1 ibib abs

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1147436 CAPLUS

DOCUMENT NUMBER:

145:454434

TITLE:

Polyurethane-coated granular fertilizers

INVENTOR(S):

Takebayashi, Yoshihiro

PATENT ASSIGNEE(S):

Sumitomo Chemical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 10pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006298673	Α	20061102	JP 2005-119371	20050418
PRIORITY APPLN. INFO.:			JP 2005-119371	20050418

Granular fertilizers coated with a polyurethane resin of the AB invention are superior with respect to suppression of the initial release of fertilizer components. The resin is obtained by reacting isocyanate with polyol 1 with a ratio of the number of C atoms to O atoms of

 $\leq$ 3.0 and polyol 2 with a C/O atomic ratio  $\geq$ 5.0. ratio [weight of polyol 1 + OH value of polyol 1]/[weight of polyol 2 + OH value of polyol 2] ranges 2.4-6.0. Thus, urea granules that were coated with polyurethane obtained with polymethylene polyphenyl polyisocyanate, propylene oxide adducts with C3-6 triols, and ricinoleic acid triglyceride had a dissoln. rate of ≤10.0% after 40 days at 25° in distilled water.

#### => d his

(FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008)

FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008 O S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES L1240 S POLYOL (L) TRIGLYCERIDE L2 45 S L2 AND POLYURETHANE L34 S L3 AND SEED L4 41 S L3 NOT L4 L5L6 3 S L5 AND DIOL L738 S L5 NOT L6 L<sub>8</sub> 1 S L7 AND TRIOL => s 13 and hydroformylation 7521 HYDROFORMYLATION 113 HYDROFORMYLATIONS 7538 HYDROFORMYLATION (HYDROFORMYLATION OR HYDROFORMYLATIONS) 3 L3 AND HYDROFORMYLATION L9

=> s 14 not 19

4 L4 NOT L9 L10

=> d 110 1-4 ibib abs

L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2007:913854 CAPLUS

TITLE:

Producing polyurethane foam from natural oil Sanders, Aaron; Babb, David; Prange, Robbyn;

AUTHOR (S): Sonnenschein, Mark; Delk, Van; Derstine, Chris; Olson,

Kurt

CORPORATE SOURCE:

SOURCE:

The Dow Chemical Company, Freeport, TX, 77541, USA Chemical Industries (Boca Raton, FL, United States)

(2007), 115(Catalysis of Organic Reactions), 377-384

CODEN: CHEIDI; ISSN: 0737-8025

PUBLISHER:

CRC Press LLC

DOCUMENT TYPE:

Journal

LANGUAGE: English

As part of the effort to reduce our dependence on fossil fuels, The Dow Chemical Company has been developing a seed oil based polyol to be used as a replacement to conventional petrochem. based polyether polyols in the production of flexible polyurethane foam. The general process for making natural oil polyols consists of four steps. In the first step, a vegetable oil (triglyceride) is transesterified with methanol, liberating glycerin, and forming fatty acid Me esters or FAMEs. In the second step the FAMEs are hydroformylated giving a complex mixture of FAMEs that contain

0-3 formyl groups per chain. In the third step, the aldehydes and the remaining unsaturates are hydrogenated to yield a mixture of FAMEs that contain 0-3 hydroxymethyl groups. Finally, the poly(hydroxymethyl) fatty esters are transesterified onto a suitable initiator to produce the natural oil polyol.

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS 16 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:265371 CAPLUS

DOCUMENT NUMBER: 134:281258

TITLE: Preparation of transesterification polyols for

polyurethane-prepolymers with specifically

regulated viscosity

Thiele, Lothar; Zander, Lars; Klein, Johann; Beuer, INVENTOR(S):

Bernd; Knips, Nicole; Doebrich, Peter

Henkel K.-G.a.A., Germany PATENT ASSIGNEE(S):

PCT Int. Appl., 18 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE: German LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE APPLICATION NO. KIND DATE PATENT NO. -----\_\_\_\_\_ \_\_\_\_\_ \_ \_ \_ \_ \_\_\_\_\_ 20010412 WO 2000-EP9312 20000923 A1 WO 2001025184 W: JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE DE 19947563 20010419 DE 1999-19947563 19991002 Α1 20020703 EP 1218332 A1 EP 2000-967760 20000923 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY JP 2001-528132 20000923 20030325 JP 2003511486 DE 1999-19947563 A 19991002 PRIORITY APPLN. INFO.:

W 20000923

WO 2000-EP9312 Transesterification polyols, useful as polyols for AΒ producing polyurethane prepolymers, are produced by the transesterification of castor oil with natural triglycerides (e.q., rape seed oil) that are free of OH-groups in the presence of Group IA or IIA metal hydroxide catalysts (e.g., lithium hydroxide). Transesterification polyols of this type with polyisocyanates also have a low, constant viscosity in the form of solvent-free or water-free compns. and are suitable for producing single or multiple

component adhesives, sealants, casting compds. or coating agents. THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 2 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:79499 CAPLUS

120:79499 DOCUMENT NUMBER:

Investigation of urethane oils based on Ecballium TITLE:

elaterium and P. mahaleb seed oils

Erciyes, A. T.; Erkal, F. S.; Kabasakal, O. S. AUTHOR(S): Fac. Chim. Metall., Istanbul Tech. Univ., Maslak,

CORPORATE SOURCE:

80626, Turk.

Pitture e Vernici Europe (1993), 69(5), 17-22 SOURCE:

CODEN: PVEUEO

DOCUMENT TYPE: Journal

LANGUAGE: English/Italian

AB Ecabellium elaterium and P. mahaleb seed oils were used in the preparation of urethane oil. Urethane oils are prepared by reacting a diisocyanate with the partial esters obtained from triglyceride oil. Consequently, urethane oils can be considered as an alkyd resin in which the phthalic anhydride is replaced by a diisocyanate. Film properties of these materials are dependent on the oil, polyol, and diisocyanate used in the formulation. Since Ecballium elaterium and P. mahaleb seed oils contain punicic and α-elecsteric acids, resp., which are conjugated trienoic acids, the use of these oils as an oil component in the urethane oils is worth investigating. Although these oils contain conjugated double bonds, no gelation occurred during the process.

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:111497 CAPLUS

DOCUMENT NUMBER: 104:111497

ORIGINAL REFERENCE NO.: 104:17671a,17674a
TITLE: Polyol compositions

INVENTOR(S): Kusakawa, Tsutomu; Ito, Yoshiyuki PATENT ASSIGNEE(S): Itoh Oil Mfg. Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
				<b>-</b>		
JP 60177013	Α	19850911	JP 1984-32980	19840222		
JP 03070731	В	19911108				
PRIORITY APPLN. INFO.:			JP 1984-32980	19840222		

Polyol compns. for 2-liquid polyurethane coatings are prepared by reaction of 1 mol triglycerides comprising 10-100% natural oils and fats with no OH groups and 0-90% castor oil, 0.1-2 mol alcs. containing tertiary N, and 0-1.9 mol low-mol.-weight polyols. The sum of the last 2 components are <2 mols. Thus, castor oil and rape seed oil were heated with Quadrol, then mixed with Takelac U-27 (polyester polyol) and Coronate L, and cured to form a coating.

=> FIL STNGUIDE COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	
FULL ESTIMATED COST	69.76	71.02	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION	
CA SUBSCRIBER PRICE	-9.60	-9.60	

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(FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008)

	FILE	'CAPL	JS	' ENTERED AT 08:58:25 ON 29 JAN 2008
L1		0	S	POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L2		240	S	POLYOL (L) TRIGLYCERIDE
L3		45	S	L2 AND POLYURETHANE
L4		4	S	L3 AND SEED
L5		41	S	L3 NOT L4
L6		3	S	L5 AND DIOL
L7		38	S	L5 NOT L6
rs		1	S	L7 AND TRIOL
L9		3	S	L3 AND HYDROFORMYLATION
L10		4	S	L4 NOT L9

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=> file caplus COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.12	71.14
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-9.60

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FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008

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O S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L1
            240 S POLYOL (L) TRIGLYCERIDE
L2
L3
             45 S L2 AND POLYURETHANE
             4 S L3 AND SEED
L4
L5
             41 S L3 NOT L4
             3 S L5 AND DIOL
L6
             38 S L5 NOT L6
L7
              1 S L7 AND TRIOL
L8
              3 S L3 AND HYDROFORMYLATION
L9
L10
              4 S L4 NOT L9
     FILE 'STNGUIDE' ENTERED AT 09:12:54 ON 29 JAN 2008
    FILE 'CAPLUS' ENTERED AT 09:13:58 ON 29 JAN 2008
=> s 12 and hydroformylation
          7521 HYDROFORMYLATION
           113 HYDROFORMYLATIONS
          7538 HYDROFORMYLATION
                 (HYDROFORMYLATION OR HYDROFORMYLATIONS)
L11
             3 L2 AND HYDROFORMYLATION
=> s 111 not 16
             3 L11 NOT L6
L12
=> d 112 1-3 ibib abs
L12 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        2002:865501 CAPLUS
                         138:205447
DOCUMENT NUMBER:
TITLE:
                         Polyols and Polyurethanes from
                         Hydroformylation of Soybean Oil
                         Guo, Andrew; Demydov, Dima; Zhang, Wei; Petrovic,
AUTHOR(S):
                         Zoran S.
                         Kansas Polymer Research Center, Business and
CORPORATE SOURCE:
                         Technology Institute, Pittsburg, KS, 66762-7560, USA Journal of Polymers and the Environment (2002),
SOURCE:
                         10(1/2), 49-52
                         CODEN: JPENFW; ISSN: 1566-2543
                         Kluwer Academic/Plenum Publishers
PUBLISHER:
                         Journal
DOCUMENT TYPE:
                         English
LANGUAGE:
     This paper compares phys. and mech. properties of polyurethanes derived
AB
     via the hydroformylation approach and is a part of our study on
     the structure-property relationships in polyurethanes created from
     vegetable oils. The double bonds of soybean oil are first converted to
     aldehydes through hydroformylation using either rhodium or
     cobalt as the catalyst. The aldehydes are hydrogenated by Raney nickel to
     alcs., forming a triglyceride polyol. The latter is
     reacted with polymeric MDI to yield the polyurethane. Depending on the
     degree of conversion, the materials can behave as hard rubbers or rigid
     plastics. The rhodium-catalyzed reaction afforded a polyol with
     a 95% conversion, giving rise to a rigid polyurethane, while the
     cobalt-catalyzed reaction gives a polyol with a 67% conversion,
     leading to a hard rubber having lower mech. strengths. Addition of glycerin
     as a cross-linker systematically improves the properties of the
     polyurethanes. The polyols are characterized by DSC. The
     measured properties of polyurethanes include glass transition temps.,
```

tensile strengths, flexural moduli, and impact strengths.

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 18

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:232425 CAPLUS

DOCUMENT NUMBER: 136:386771

Polyurethanes based on hydroformylated soybean oil TITLE: Guo, Andrew; Demydov, Dima; Zhang, Wei; Petrovic, AUTHOR(S):

Zoran S.

CORPORATE SOURCE: Kansas Polymer Research Center, Pittsburg State

University, Pittsburg, KS, 66762, USA

PMSE Preprints (2002), 86, 385-386 SOURCE: CODEN: PPMRA9; ISSN: 1550-6703

American Chemical Society PUBLISHER:

Journal; (computer optical disk) DOCUMENT TYPE:

English LANGUAGE:

We were investigating the structure-property relationships of AΒ polyurethanes derived from vegetable oils. The double bonds of a

vegetable oil is first converted to aldehydes through

hydroformylation using either rhodium or cobalt as the catalyst. The aldehydes are hydrogenated by Raney nickel to alcs. therefore a

triglyceride polyol is formed. The latter is reacted

with an isocyanate to yield a polyurethane. Depending on the degree of conversion, the materials can behave as a soft rubber or a rigid plastic.

The rhodium catalyzed reaction afforded a polyol with a >90%

conversion, therefore the polyurethane is rigid and has higher moduli.

While cobalt gives a soft polymer having low mech. strength.

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 16 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

2002:191841 CAPLUS ACCESSION NUMBER:

Polyurethanes based on hydroformylated soybean oil TITLE: Guo, Andrew; Demydov, Dima; Zhang, Wei; Petrovic, AUTHOR(S):

Zoran S.

Kansas Polymer Research Center, Pittsburg State CORPORATE SOURCE:

University, Pittsburg, KS, 66762, USA

Abstracts of Papers, 223rd ACS National Meeting, SOURCE:

Orlando, FL, United States, April 7-11, 2002 (2002), PMSE-257. American Chemical Society: Washington, D.

C.

CODEN: 69CKQP

Conference; Meeting Abstract DOCUMENT TYPE:

English LANGUAGE:

As the oil crisis and global warming deepen, biobased materials have received considerable attention, recently and beyond. Both agriculture and industry will benefit from the use of such materials from renewable resources. At the Kansas Polymer Research Center, we have been investigating the structure-property relationships of polyurethanes derived from vegetable oils. The double bonds of a vegetable oil is first converted to aldehydes through hydroformylation using either rhodium or cobalt as the catalyst. The aldehydes are hydrogenated by Raney nickel to alcs. therefore a triglyceride polyol is formed. The latter is reacted with an isocyanate to yield a polyurethane. Depending on the degree of conversion, the materials can behave as a soft rubber or a rigid plastic. The rhodium catalyzed reaction afforded a polyol with a >90% conversion, therefore the

polyurethane is rigid and has higher moduli. While cobalt gives a soft polymer having low mech. strength.

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FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008

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L4		4	S L3	AND	SEE	D				
L5		41	S L	NOT	L4					
L6		3	S L	AND	DIO	L				
L7		38	S L	NOT	L6					
L8		1	SL	AND	TRI	OL				
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